



IFW

In the United States Patent and Trademark Office

Serial No.: 10/506,917

§ Filing Date: 05/21/2005

Title: SYSTEM AND METHOD FOR THE
PRODUCTION OF RECOMBINANT
GLYCOSYLATED PROTEINS IN A
PROKARYOTIC HOST

§ Examiner: RAO, Manjunath N.

Applicant: AEBI, Markus et al.

§ Art Unit: 1645

§ Atty docket No: PUS-E005-103B

INFORMATION DISCLOSURE STATEMENT

To: U.S. Patent and Trademark Office
Customer Service Window
Commissioner for Patents
Randolph Building
401 Dulany Street
Alexandria, VA 22314
USA

Dear Sir,

Pursuant to the provisions of 37 C.F.R. §1.97, Applicant encloses the references set forth in the attached modified form PTO/SB/O8A. No inference should be made that the cited references are in fact material, are in fact prior art, are analogous art, or that no better art exists. The cited patents are listed in numerical order and not in any order based on their pertinence.

It is requested that the Examiner fully consider the cited references and that they be cited on the front of any patent issuing from this application.

An early action on the merits is respectfully requested.

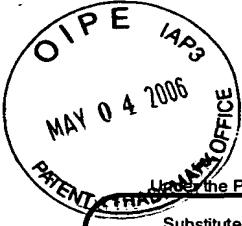
If the Examiner has further questions, he is invited to contact the undersigned at phone 011-4171 230 1000, fax at 011-4171 230 1001 or e-mail at sherman@patentinfo.net.

Respectfully submitted,

Sherman D. PERNIA
U.S. Reg. No. 34,404

Date: 27 April 2006

Enclosures: IDS form
copies
return postcard



PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
is a collection of information unless it contains qualified OMB control numbers.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/506,917
Filing Date	05/21/2005
First Named Inventor	AEBI, Markus
Art Unit	1645
Examiner Name	RAO, Manjunath N.
Attorney Docket Number	PUS-E005-103B

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
		WO 00/52135	09/08/2000	BETENBAUGH et al.	entire doc.	
		WO 01/88117	11/22/2001	BAYER	entire doc.	
		WO 02/00856	01/03/2002	CONTRERAS et al.	entire doc.	
		WO 03/074687	09/12/2003	AEBI et al.	entire doc.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/506,917		
		Filing Date	05/21/2005		
		First Named Inventor	AEBI, Markus		
		Art Unit	1645		
		Examiner Name	RAO, Manjunath N.		
Sheet 2	of 3	Attorney Docket Number			
				PUS-E005-103B	

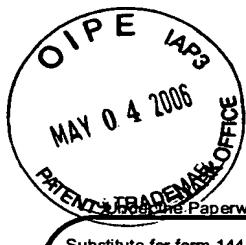
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	FRY et al., The lipopolysaccharide biosynthesis locus of <i>Campylobacter jejuni</i> 81116, <i>Microbiology</i> , Vol. 144, p. 2049-61 (1998)	
	2	BURDA et al., The dolichol pathway of N-linked glycosylation, <i>Biochimica et Biophysica Acta</i> 1426, p. 239-57 (1999)	
	3	SZYMANSKI et al., Evidence for a system of general protein glycosylation in <i>Campylobacter jejuni</i> , <i>Molecular Microbiology</i> , Vol. 32, Issue 5, p. 1022-30 (June 1999)	
	4	YOUNG et al., Structure of the N-Linked Glycan Present on Multiple Glycoproteins in the Gramnegative Bacterium, <i>Campylobacter Jejuni</i> ,	
		The Journal of Biological Chemistry, Vol. 277, No. 45, p. 42530-39 (November 2002)	
	5	WACKER et al., N-Linked Glycosylation in <i>Campylobacter jejuni</i> and Its Functional Transfer into <i>E. coli</i> , <i>Science</i> , Vol. 298, p. 1790-93 (November 2002)	
	6	WACKER et al., PgIB, an oligosaccharyltransferase in the eubacterium <i>Campylobacter jejuni</i> ?, <i>Glycobiology</i> , Vol. 11, p. 871 (October 2001)	
	7	VARKI et al., <i>Essentials of Glycobiology</i> , Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York, 1999	
	8	GRABENHORST et al., Genetic engineering of recombinant glycoproteins and the glycosylation pathway in mammalian host cells, <i>Glycoconjugate Journal</i> , 16, p. 81-97 (1999)	
	9	ALTMANN et al., Insect cells as hosts for the expression system for recombinant glycoproteins, <i>Glycoconjugate Journal</i> , 16, p. 109-123 (1999)	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known
				Application Number 10/506,917
				Filing Date 05/21/2005
				First Named Inventor AEBI, Markus
				Art Unit 1645
				Examiner Name RAO, Manjunath N.
Sheet	3	of	3	Attorney Docket Number PUS-E005-103B

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	10	MALISSARD et al., The yeast expression system for recombinant glycosyltransferases, Glycoconjugate Journal, 16, p. 125-139 (1999)		
	11	MARAS et al., Filamentous fungi as production organisms for glycoproteins of bio-medical interest, Glycoconjugate Journal, 16, p. 99-107 (1999)		
	12	FUJITA et al., Synthesis of neoglycoenzymes with homogenous N-linked oligosaccharides using immobilized endo-S-N-acetylglucosaminidase A,		
		Biochemical and Biophysical Research Communications, 267, p. 134-38 (2000)		
	13	GAVEL et al., Sequence differences between glycosylated and non-glycosylated Asn-X-Thr/Ser acceptor sites: implications for protein engineering,		
		Protein Eng, 3, p. 433-42 (1990)		

Examiner Signature		Date Considered
--------------------	--	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.